

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

SAN GABRIEL, et al.

Serial No.: Not yet assigned

Filed: April 21, 2004

Title: **NOVEL GLUTAMIC ACID RECEPTOR AND UTILIZATION THEREOF**

(Continuation of International Application No. PCT/JP02/10984, having an International Filing Date of October 23, 2002.)

INFORMATION DISCLOSURE STATEMENT

Commissioner of Patents
Alexandria, Virginia 22313-1450

Sir:

An Information Disclosure Statement is submitted herewith pursuant to 37 C.F.R. §1.97-1.98. Please note the following particulars:

[NOTE: One only of items a, b, c, and d must be checked.]

- [x] a. The enclosed statement is being filed within three months of the filing date of a national application, or within three months of the date of entry into the national stage as set forth in 37 C.F.R. §1.491 in an international application, or before the mailing date of a first Office Action on the merits, whichever event occurs last.
- [] b. The enclosed statement is being filed after a first action on the merits but before the mailing date of a final action under 37 C.F.R. §1.113, or a notice of allowance under 37 C.F.R. §1.311.

The enclosed statement is accompanied by [check one]:

- [] i. a certification in part (e) below as specified in 37 C.F.R. §1.97(e), or
- [] ii. a check in the amount required by 37 C.F.R. §1.17(p).
- [] c. The enclosed statement is being filed after the mailing date of a final action under 37 C.F.R. §1.113, or a notice of allowance under 37 C.F.R. §1.311, but before payment of the issue fee.
- [] Certification report(e) below; and
- [] a check in the amount as required by §1.17(p).
- [] d. The enclosed statement is being filed pursuant to 37 C.F.R. §1.97(i), for placement in the file.
- [] e. Certification [Check one] [Certification is required only if box (b) (i) or box (c) is checked.]

- [] I hereby certify that each item of information contained in the enclosed Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement,
- or
- [] I hereby certify that no item of information in the enclosed Information Disclosure Statement herewith was cited in a communication from a foreign patent office in a counterpart foreign application, or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing of this Information Disclosure Statement.
- or
- [] Appropriate certification is attached.
- [x] f. If no check is enclosed and a fee is due in connection with this communication or if the check enclosed is insufficient, the Commissioner is authorized to charge any fee or additional fee due in connection with this communication to Deposit Account No. 14-0112.
- [x] g. Copies of the documents are attached herewith with a completed Form PTO-1449.
- or
- [] Copies of the documents are not attached as allowed under CFR 1.98(d)(1)(2). The earlier application is identified as:

The Examiner is respectfully requested to cite the documents listed on the attached Form PTO-1449 in the next Office Action. In so doing, the Examiner is respectfully requested to initial in the space adjacent to the listing of each document on the Form PTO-1449, and return a copy of the initialed Form PTO-1449 with the next communication to Applicants, to confirm that these documents have been considered by the Examiner and made of record in this application.

If the Examiner has any questions or wishes to discuss this application, kindly telephone the undersigned at the below-listed number.

Respectfully submitted,
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FORM PTO-1449

INFORMATION DISCLOSURE CITATIONAtty Docket
26099Serial No.
Not yet assigned

Applicant

SAN GABRIEL, et al.

Filing Date
April __, 2004Group Art Unit
Not yet assigned

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Issue Date	Name	Class	Sub-Class	Filing Date
AA						

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Sub-Class	Translation
AB					

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AC	Chaudhari, N., et al., "A metabotropic glutamate receptor variant functions as a taste receptor". Nature Neuroscience, February 2000, vol. 3, no. 2, pp. 113-119.
AD	Niiijima, A., "Effects of oral and intestinal stimulation with umami substance on gastric vagus activity". Physiology & Behavior, 1991, vol. 49, no. 5, pp. 1025-1028.
AE	Dingledine, R. & Conn, P. J., "Peripheral glutamate receptors: molecular biology and role in taste sensation". Journal of Nutrition, April 2000, vol. 130, no. 4S, Suppl., pp. 1039S-1042S.
AF	O'Hara, P. J., et al., "The ligand-binding domain in metabotropic glutamate receptors is related to bacterial periplasmic binding proteins". Neuron, 1993, vol. 11, pp. 41-52.
AG	Han, G. & Hampson, D. R., "Ligand binding to the aminoterminal domain of the mGluR4 subtype of metabotropic glutamate receptor". J. Biol. Chem., 1999, vol. 274, no. 15, pp. 1008-1013.
AH	Pelteková, V., et al., "Constraints on proper folding of the amino terminal domains of group iii metabotropic glutamate receptors". Molecular Brain Research, 2000, vol. 76, pp. 180-190.
AI	Barnard, E. A., "Ionotropic glutamate receptors: new types and new concepts". TiPS, May 1997, vol. 18, pp. 141-148.
AJ	Schoepp, D. D., et al., "Metabotropic glutamate receptors in brain function and pathology". TiPS, January 1993, vol. 14, pp. 13-20.
AK	Tanabe, Y., et al., "A family of metabolic glutamate receptors". Neuron, January 1992, vol. 8, pp. 169-179.
AL	Flor, P. J., et al., "Molecular cloning, functional expression and pharmacological characterization of the human metabotropic glutamate receptor type 4". Neuropharmacology, 1995, vol. 34, no. 2, pp. 149-155.

Examiner

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609.
 Draw line through citation if not in conformance and not considered.
 Include copy of this form with next communication to Applicant.

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Examiner Initial	Document Number	Issue Date	Name	Class	Sub-Class	Filing Date
BA						

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Sub-Class	Translation
BB					

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

BC	Berk, M., et al., "Platelet Glutamate receptor supersensitivity in major depressive disorder". Clinical Neuropharmacology, 2001, vol. 24, no. 3, pp. 149-155.
BD	Karim, F., et al., "Metabotropic glutamate receptor subtypes 1 and 5 are activators of extracellular signal-regulated kinase signaling required for inflammatory pain in mice". Journal of Neuroscience, June 1, 2001, vol. 21, no. 11, pp. 3771-3779.
BE	Berk, M., et al., "The specificity of platelet glutamate receptor supersensitivity in psychotic disorders". Life Sciences, 2000, vol. 66, no. 25, pp. 2427-2432.
BF	Carlton, S. M., et al., "Inflammation-induced changes in peripheral glutamate receptor populations". Brain Research, 1999, vol. 820, pp. 63-70.
BG	Haxhiu, M. A., et al., "The role of excitatory amino acids in airway reflex responses in anesthetized dogs". Journal of the Autonomic Nervous System, 1997, vol. 67, pp. 192-199.
BH	Inagaki, N., et al., "Expression and role of ionotropic glutamate receptors in pancreatic islet cells". The FASEB Journal, May 1995, vol. 9, pp. 686-691.
BI	Erdö, S. L., "Excitatory amino acid receptors in the mammalian periphery". TIPS, November 1991, vol. 12, pp. 426-429.
BJ	Aas, P., et al., "Stimulation of peripheral cholinergic nerves by glutamate indicates a new peripheral glutamate receptor". European Journal of Pharmacology, 1989, vol. 164, pp. 93-102.
BK	Said, S., et al., "Glutamate signaling in the lung". TRENDS in Pharmacological Sciences, July 2001, vol. 22, no. 7, pp. 344-345.
BL	Skerry, T. M., et al., "Glutamate signaling in non-neuronal tissues". TRENDS in Pharmacological Sciences, April 2001, vol. 22, no. 4, pp. 174-181.
BM	Bray, G. A., "3 rd plenary session on 'signaling in body-weight homeostasis' afferent signals regulating food intake". Proceedings of the Nutrition Society, 2000, vol. 59, pp. 373-384.

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CA						

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Sub-Class	Translation
CB					

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

CC	Bray, G. A., "Nutrient balance and obesity: an approach to control of food intake in humans". Medical Clinics of North America, January 1989, vol. 73, no. 1, pp. 29-45.
CD	Mei, N., "Recent studies on intestinal vagal afferent innervation. Functional implications". Journal of the Autonomic Nervous System, 1983, vol. 9, pp. 199-206.
CE	Mei, N., et al., "Current data and ideas on digestive sensitivity". Journal of the Autonomic Nervous System, 1992, vol. 41, pp. 15-18.
CF	Mei, N., "Intestinal chemosensitivity". Physiological reviews, the American Physiological Society, April 1985, vol. 65, no. 2 pp. 211-237.
CG	Uezono, Y., et al., "Receptors that couple to 2 classes of G proteins increase cAMP and activate CFTR expressed in Xenopus oocytes". Receptors and Channels, vol. 1, pp. 233-241.
CH	Cunningham, S. A., et al., "cAMP-stimulated ion currents in Xenopus oocytes expressing CFTR cRNA". American Physiological Society, 1992, pp. C783-C788.
CI	Naples, M. A., et al., "Pharmacological profiles of the metabotropic glutamate receptor ligands [³ H]L-AP4 and [³ H]CPPG". Neuropharmacology, 2001, vol. 40, pp. 170-177.
CJ	Thomsen, C., et al., "Cloning and characterization of a metabotropic glutamate receptor, mGluR4b". Neuropharmacology, 1997, vol. 36, pp. 21-30.
CK	Adams, S. R., et al., "Fluorescence ratio imaging of cyclic AMP in single cells". Nature, vol. 349, February 21, 1991, pp. 694-697.
CL	McConnell, H. M., et al., "The Cytosensor Microphysiometer: Biological applications of silicon technology". Science, vol. 257, September 25, 1992, pp. 1906-1912.

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